

# Chicago High-Speed Rail Case Study Summary



Chicago Mayor  
Richard M. Daley

“Chicago enthusiastically supports the recent historic federal commitments to the future of passenger rail service in America and is dedicated to establishing Chicago Union Station as the preeminent hub of high-speed and intercity passenger rail service in the Midwest and throughout the United States.

For more than a decade, the City has been working in partnership with our Congressional delegation and colleagues in the State of Illinois government, Amtrak, the freight railroad industry, as well as the governments of surrounding states to develop a coordinated approach towards realizing a shared vision for improved and expanded intercity passenger rail service. In 2009, Illinois Governor Pat Quinn took these efforts to the next level by calling upon myself and the governors of seven Midwest states to form a Midwest High-Speed Rail Steering Group that is now successfully pursuing a coordinated approach to securing and stewarding the resources that recent and anticipated federal funding authorizations have made and will make possible.

Chicago is a dedicated and active partner in the development of high-speed rail and improved intercity passenger rail service in the Midwest and throughout the country.”

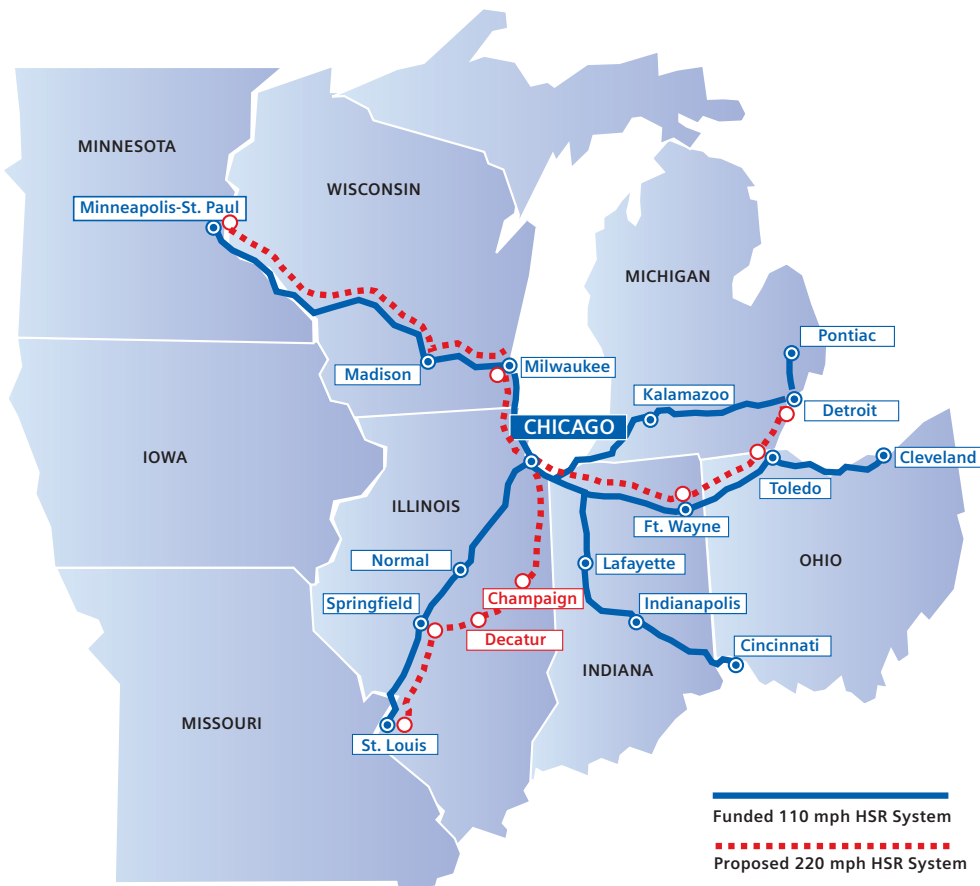
**City and Region Definition.** Among the case studies for high-speed rail, Chicago stands out for its position as the center of a vast economic region with the broadest set of proposed intercity connections. The city itself has a population of 2.8 million, the six-country metro area (which reaches into Wisconsin and Indiana) has a population of 8.5 million and the consolidated metropolitan area encompasses 9.6 million people. However, it has been widely noted that Chicago also serves as the economic center of a Great Lakes-Midwest economic region with nearly 100 million people living within a 500-mile distance that reaches into eight states. The governors of those eight states and the mayor of Chicago signed an agreement in 2009 to work together to bring high-speed rail to the region through a set of rail lines based on a common Chicago hub.

**Economy.** Chicago’s economy competes in a global marketplace and is a major center for corporate headquarters. Manufacturing is still the region’s largest major employment sector (accounting for 430,000 jobs within the metropolitan area), and it has continued to gain in labor productivity to bolster global competitiveness. Other major sectors

include healthcare, education, research and development, retail, financial services, as well as professional and technical services. The Chicago area is currently a leading center for production of medical equipment and packaged food products. The financial center of the Midwest, Chicago also annually attracts 45 million visitors from elsewhere in the U.S. and abroad.

The city is a major transportation gateway to the Midwest, the U.S., and the world. O’Hare International Airport is one of the world’s busiest airports, with flights to more than 60 foreign destinations. It is also a hub for both United and American Airlines. Midway Airport is a hub for Southwest Airlines. Together, the two airports provide nearly 3,000 daily flights serving more than 220 cities. Chicago is also a hub for six of the seven Class I North American freight railroads, as well as six major U.S. Interstate highways. Chicago’s urban transit system, the Chicago Transit Authority, provides more than 1.6 million trips every weekday on 140 bus routes and eight rail lines. The region’s commuter rail agencies, Metra and Northern Indiana Commuter Transportation District, serve more than 300,000 daily trips on 12 rail lines.

Figure 2. Proposed Initial HSR intercity passenger routes serving Chicago



High-speed rail service could help generate another 12,000 to 18,000 jobs in downtown Chicago.

### Proposed High-Speed Rail Routes

A distinguishing aspect of proposed high-speed rail services to Chicago is the extent of proposed HSR lines serving other major metropolitan areas that are all designed to converge on the Chicago hub. The lines that have received some initial federal funding and are the focus of analysis here include: (1) South to St. Louis, (2) Northwest to Milwaukee, Madison, and Minneapolis/St. Paul, and (3) East to Detroit. Additional high-speed rail lines that are part of the long-term vision are: (4) Southeast to Indianapolis and Cincinnati, (5) Southwest to Des Moines and Omaha and (6) East to Cleveland.

Various studies have estimated either annual ridership or revenue for specific corridors in the entire proposed Midwest regional rail system. A recent concept plan for 220 mph service on the Chicago-St. Louis route estimated ridership between 1.5 million and 2.9 million passengers per

year.<sup>2</sup> Independent estimates developed for this study indicate that annual demand for the Chicago-St. Louis route is approximately 1.1 to 2.1 million. Demand on each of the three routes for the 110 mph and 220 mph operating scenarios are shown in Table 4.

### Quantitative Assessment of Potential Economic Development Impacts

**Types of Economic Impact.** High-speed rail service will provide advantages to the City of Chicago and the entire metropolitan area as a result of enlarged visitor and tourism markets, reduced travel time and greater connectivity to outlying cities, as well as associated business productivity gains. The ability of high-speed rail services to expand labor markets and business travel opportunities also enables it to support the local growth of the financial services, insurance, technical services and technology industry firms in downtown business districts and other office centers.

### Local Impact (Visitor Spending and Station Area Development)

- The Midwest Regional Rail Initiative estimated that a 110 mph Midwestern rail service would result in a net gain of 5 million trips per year to and from Union Station by the Year 2040.<sup>3</sup>
- A separate study of service proposed for the Chicago-St. Louis corridor indicates that faster 220 mph HSR with a link to O'Hare Airport would likely generate an additional 3.7 million trips per year coming to Chicago Union Station over current station volumes.<sup>4</sup>
- These studies are in line with general expectations that Chicago Union Station may have an increase of roughly five million intercity trips (in addition to the current Amtrak trip volume of 3.1 million/year and Metra commuter rail volume of 28 million/year).

<sup>2</sup>Midwest High-Speed Rail Association, *Chicago to St. Louis 220 mph High-Speed Rail Alternative Corridor Study*, Volume 2—Ridership & Benefits, January 14, 2010.

<sup>3</sup>Midwest Regional Rail Initiative, *Benefit Cost & Economic Analysis*, TEMS in association with HNTB, 2006.

<sup>4</sup>*Chicago to St. Louis 220 mph High-Speed Rail Alternative Corridor Study*, Volume 2, TranSystems, January 2010.

Table 4. Estimated Chicago-Based 2035 Annual Ridership for HSR Service (one-way trips)

Chicago to:	110 mph	220 mph
St. Louis	1,106,600	2,093,700
Minneapolis	1,960,500	3,796,000
Detroit	1,877,700	3,710,500
<b>TOTAL</b>	<b>4,944,800</b>	<b>9,600,200</b>

Ridership estimates are illustrative examples based on prior studies conducted for various HSR operating scenarios.

- This includes around 3 million additional passenger trips coming into downtown Chicago that would otherwise not occur (since they would come into the metropolitan area via air or road travel and not necessarily visit downtown). These include trips by residents of outlying cities and smaller communities who travel to Chicago for business meetings or for sports and cultural attractions and events; visitors who fly into O'Hare and Midway airports from around the world and around the nation and then ride HSR to their regional destinations; and those who ride the high-speed rail into Chicago from out-of-state areas for business or leisure trips.
- The 3 million added visitors are estimated to generate roughly \$700 million per year of spending in the region, though it is estimated that roughly \$42 to \$50 million per year of it is entirely new spending in the region (created by trips that would otherwise not have occurred),<sup>5</sup> and another \$100 to 150 million per year is spending that is now channeled into downtown Chicago because of the high-speed rail terminus, which would otherwise occur elsewhere in the region if the travelers had driven or flown into the Chicago region.



#### Downtown Commercial Development.

High-speed rail service will also support the expansion of labor markets and service industry markets, as well as inter-industry business travel—all enabling additional office development associated with growth of target industries.

- A study conducted for the Midwest Regional Rail Initiative estimated that high-speed rail service could help generate another 12,000 to 18,000 jobs in downtown Chicago.<sup>6</sup>
- For this study, it is estimated that visitor spending enabled by three specific HSR lines will directly support 2,000 additional jobs.
- Office business attraction enabled by HSR is estimated to attract between 4,500 and 8,500 net additional jobs in the downtown area.
- The total direct effect of HSR service on jobs is thus estimated at between 10% and 17% of the total (63,000) employment growth projected by the Central Area Plan “opportunity scenario” for downtown between 2010 and 2035.

<sup>5</sup>These figures are consistent with the most recent St. Louis to Chicago study that assumed up to 6.5% of all forecast ridership is induced new travel.

<sup>6</sup>Midwest Regional Rail Initiative, Benefit Cost & Economic Analysis, TEMS in association with HNTB, 2006.

Table 5. Estimated Annual Total Economic Impacts of Chicago-Based HSR Service in 2035 (2009 \$)

Measure	Unit	110 mph	220 mph
2035 Employment	Jobs	18,374	42,200.0
2035 Output (Sales)	\$m per year	\$2,577.8	\$6,087.3
2035 Value-Added (GRP)	\$m per year	\$1,489.7	\$3,554.8
2035 Wages	\$m per year	\$1,033.0	\$2,466.6

Estimates of the potential economic impact are based on: (a) Full implementation of the proposed Midwest HSR system, (b) A metropolitan economy that remains healthy and continues to grow over the next twenty years, and (c) Supportive public policies and infrastructure investments to allow the benefits of HSR to be realized, and the projected additional business development to occur.

**Regional Impact.** In addition to the direct growth of business activity supported by visitor spending and the direct attraction of development around Chicago Union station, the proposed rail service will have broader regional impacts on travel time savings and travel cost savings for train riders. It will also result in reduced congestion for those still flying, riding buses, or driving cars and trucks. The ability of HSR services to expand labor markets and business travel opportunities also enables it to support the growth of financial service and insurance industries in downtown Chicago and technology services in other office centers. It can additionally enable broader reach for business conventions. These impacts, in addition to net expansion of visitor spending and office market attraction, will also lead to further “indirect” growth of suppliers to growth businesses and “induced” growth supported by the additional consumer spending of worker wages.

The total potential long-term economic impact of proposed high-speed rail service will grow over time as rail service is fully implemented and the savings in travel time, expense and congestion reduction are realized. Outcomes will ultimately depend on travel speeds and schedules. The current plan is for medium speed (110 mph peak) service along three major intercity passenger rail lines converging on downtown Chicago (from St. Louis, Minneapolis/St. Paul and Detroit). However, this study also considered an alternative scenario in which dedicated tracks later enable even higher speed (220 mph peak) service, as has been proposed by Illinois DOT (for the St. Louis line) and by other states and stakeholder groups (for the other lines).

- Depending on the scenario, the estimated economic impact potential as of the year 2035 is \$2.6 billion per year of additional business sales with the medium speed scenario, rising to \$6.1 billion per year with the high-speed scenario.
- These values include \$1.5 to \$3.6 billion per year of value-added (GRP). Of that value-added, roughly \$1 billion to \$2.5 billion per year is worker wages, associated with 18,300 to 42,200 jobs.
- The impact will grow over time, so it will be expected to be less than this amount before 2035, and potentially more than this amount in later years. It is also important to note that these different impact measures cannot be added because they are all alternative ways of measuring the same economic growth.